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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,133	04/13/2000	Steven M. Swam	2316.1175US01	7533

23552 7590 10/18/2006

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EXAMINER

SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/549,133

Applicant(s)

SWAM ET AL.

Examiner

Ramnandan Singh

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 9-10, 13-15, 17-24, 27, 37-40, 42-47, 49-53, 55-59, 61-63, 69-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 9-10, 13-15, 17-24, 27, 37-40, 42-47, 49-53, 55-59, 61-63, 69-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the finding of new art, the indicated allowability of claims set forth in the Office action dated March 26, 2006 is withdrawn. Applicant's arguments filed on Jul. 24, 2006 are moot, as new ground(s) of rejection are made.

Drawings

2. The drawings are objected to because Figures 3A, 3B, 5C, 5D, 5E, 6-13 do not have legends describing the drawings therein. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Note: The applicant's arguments submitted with respect to the drawings objection are disapproved.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Claim 1 recites the limitation "second tracings" in line 21. Replace the term "second tracings" with the term "second tracing; and".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 15, 37, 52-53, 57-59, 70, 73, 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "mixed data/voice signals" in lines 4, 8 and 24. It is unclear whether the symbol "/" indicates "alternative" or "and". A similar thing holds for claims 37, 52, 57, 58, 59, 70, 73 and 76.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3-5, 9-10, 13-15, 17-24, 27, 37-40, 42-47, 49-53, 55-59, 61-63, 69-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier et al [US 6,430,288 B1] in view of Dithie et al [US 4,821,150].

Regarding claim 1, Frazier et al teach a telecommunication component (i.e. **splitter assembly 10**), as shown in Fig. 1, comprising:

a circuit board (i.e. **a splitter circuit on a card**) [col. 3, lines 32-45; col. 6, lines 17-23];

a first multi-pair cable connector for inputting twisted pair, mixed data/voice signals to the circuit board (i.e. **card**);

a second multi-pair cable connector for outputting twisted-pair, voice signals from the circuit board (i.e. **card**);

a third multi-pair cable connector for outputting twisted pair, data signals or mixed data/voice signals from the circuit board [col. 6, lines 29-56; col. 2, lines 44-58; col. 3, lines 46-54]. Further, first tracings, second tracings and third tracings are not shown which are used to maintain electrical separation between two connectors. In addition, since there is only one edge connector with the interface circuit connected to the Splitter, the contacts are normally closed.

Frazier et al do not teach one or more card edge connectors connected to the circuit board, the one or more card connector.

Duthie et al teach a card edge connector (52) connected to a circuit board (known as a line card) (26) ,having a plurality of conductive members (53), in a conventional fashion, for making proper connection when inserted into a mating receptacle connector [Fig. 2; col. 4, lines 11-26; col.3, lines 23-30; col. 5, lines 17-35; col. 2, lines 7-35; col. 5, line 67 to col. 7, line 5], wherein the card edge connector includes a group of normally closed contacts (i.e. male connector); and a group of normally open contacts (i.e. female connector); all of the normally open contacts being grouped separately from the normally closed contacts which is an inherent feature of card edge connectors. It is nevertheless a teaching to one of ordinary skill in the art to apply the same to other applications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Duthie et al et al with Frazer et al in order to use one or more card edge connectors of the circuit board to connect the splitter of Frazier et al to receive signals from a transmission system in telephonic communications [Duthie et al; col. 1, lines 5-20].

Further, the limitation "a splitter card adapted for connection to one or more card edge connectors of the circuit board" contains an element, "adapted for" performing a

function. It has been held that the recitation that an element "adapted for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchinson, 69 USPQ 138.

Claim 15 is essentially similar to claim 1 except for a circuit board (i.e. **a splitter circuit on a card**) aligned generally at a perpendicular orientation relative to the reference back plane. Although Frazier et al teach a splitter assembly (10) having a housing 12 and circuit board providing no specific orientation [Fig. 1; col. 2, lines 44-58], it would have been obvious to one of ordinary skill at the time the invention was made to use any orientation for the circuit board relative to the reference back plane to accommodate the splitters subject to circuit, system and design constraints.

Claims 37, 44, 51, 52, 57, 58, 69, 73, 76 are essentially similar to claim 1 and are rejected for the reasons stated above.

Claims 53, 59, 70 are essentially similar to claim 15 and are rejected for the reasons stated above.

Regarding claim 30, Frazier et al also disclose the splitter assembly that includes a plurality of POTS splitter card that includes at least 24 POTS splitter [Abstract; col. 6, lines 29-61].

Regarding claim 5, Duthie et al teach a first card edge connector and a separate second card edge connector, the first card edge connector including the normally closed contacts (i.e. male connector) and the second card edge connector including the normally open contacts (i.e. female connector) [col. 5, lines 18-35; col. 5, line 67 to col. 6, line 34].

Regarding claim 9, although Frazier et al teach a splitter assembly (10) having a housing 12 and circuit board providing no specific orientation [Fig. 1; col. 2, lines 44-58], it would have been obvious to one of ordinary skill at the time the invention was made to use any orientation for the circuit board relative to the reference back plane to accommodate the splitters subject to circuit, system and design constraints.

Regarding claims 10, 13, 14, the limitations are shown above.

Regarding claim 3, Frazier et al further teach the telecommunications component (i.e. splitter assembly), wherein the splitter card comprises POTS splitters (68) [Fig. 1].

Claims 17, 55, 61, 71 are essentially similar to claim 3 and are rejected for the reasons stated above.

Regarding claim 4, Frazier et al further teach the telecommunications

component, wherein the splitter card includes at least 24 of the POTS splitters
[Abstract; col. 6, lines 29-61].

Claims 18, 56, 62, 72 are essentially similar to claim 3 and are rejected for the reasons stated above.

Regarding claims 74-75, the limitations are shown above.

Regarding claim 19, Frazier et al further teach the telecommunications component, wherein the chassis includes opposing slots, wherein the circuit board is mounted in the slots [col. 3, lines 22-30].

Regarding claims 20-24, 27, 63, the limitations are shown above.

Regarding claims 38-40, 42-43, 45-47, 49-50, the limitations are shown in claim 1 above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Staber et al [US 6,996,232 B1] teach xDSL splitter line modules for network interface device [Whole document].

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
Art Unit 2614

A handwritten signature in black ink, appearing to be 'RS' with a long horizontal stroke extending to the right.